



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,802	01/21/2004	Kazuhide Kubota	U 014995-1	2305
7590	02/14/2006			
Ladas & Parry 26 West 61 Street New York, NY 10023			EXAMINER HUFFMAN, JULIAN D	
			ART UNIT 2853	PAPER NUMBER

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/761,802	Applicant(s) KUBOTA, KAZUhide	
	Examiner Julian D. Huffman	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 23 February 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. A translation of JP 2000-192740 is provided, and a translation for JP 2002-192740 has not been provided. It is further noted that JP 2000-192740 has not been considered since it has not been listed on the 1449.

Election/Restrictions

2. Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 16 December 2005.

Claim Objections

3. Claims 8-13 are objected to because of the following informalities:

Art Unit: 2853

Claim 8 includes the step of applying an image formation ink and a reactive clear ink one over the other onto a recording medium with a recording head to form a mixed dot and detecting dot omission by measuring the image density of the mixed dot.

This language is not clear since if a dot omission occurred, there would be no mixed dot to detect. Further, if a dot omission occurs, then both the image formation ink and the reactive ink cannot be applied one over the other to form a mixed dot.

A similar correction is required for claim 13, which refers to the judging unit judging the dot omission depending on the image density of the mixed dot.

In claim 13, last paragraph, it is respectfully suggested that the quotation symbols (") be omitted.

In claim 11, "of single dot" should be changed to "of a single dot".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-10, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshino et al. (U.S. 5,898,443).

Yoshino et al. discloses :

Art Unit: 2853

With regards to claim 8, an ink jet recording process (title) comprising the steps of:

applying an image formation ink and a reactive clear ink one over the other onto a recording medium with a recording head to form a mixed dot (column 14, lines 45-61); and

detecting dot omission, in which the presence or absence of dot omission of the reactive clear ink is judged by measuring the image density of the mixed dot (column 16, lines 20-39).

With regards to claim 9, the ink jet recording process according to claim 8, wherein the dot omission detecting step is a step of judging the dot omission of the reactive clear ink as absent when the image density of the mixed dot exceeds a specified reference value, and judging the dot omission of the reactive clear ink as present when the image density of the mixed dot is equal to or less than the specified reference value (column 15, lines 60-62, when the reactive clear ink and the image formation ink are overlayed, density may be either higher or lower, as compared to printing with only the image formation ink, resulting in a density difference compared to printing with only the image formation ink, thus if the density difference is detected, dot omission is absent and if the density difference is not present, dot omission is detected).

With regards to claim 10, the ink jet recording process according to claim 9, wherein a single dot is formed in a region on the recording medium other than the region where the mixed dot is formed, by independently recording the image formation ink, and the reference value is prepared based on the image density of the single dot (fig. 16 and column 16).

Art Unit: 2853

With regards to claim 12, the ink jet recording process according to claim 8, which further comprises a step of carrying out ink jet recording when the dot omission of the reactive clear ink is judged as absent by the dot omission detecting step (if dot omission is absent, the device operates as normal), and carrying out cleaning of the recording head when the dot omission of the reactive clear ink is judged as present by the dot omission detecting step (column 16, lines 52-56).

With regards to claim 13, an ink jet recording apparatus (fig. 12) capable of applying an image formation ink and a reactive clear ink one over the other onto a recording medium with a recording head to form a mixed dot (column 14, lines 45-61), which comprises:

- an image density measuring unit capable of measuring the image density of the mixed dot (column 16, lines 52-56);

- a judging unit capable of judging the presence or absence of dot omission of the reactive clear ink depending on the image density of the mixed dot (fig. 14, element 1201 controls the entire device and performs the judging operations);

- a cleaning mechanism capable of cleaning the recording head (fig. 12, element 300, column 16, lines 52-56); and

- a control unit capable of selecting either "ink jet recording with the recording head" or "cleaning of the recording head with the cleaning mechanism" depending on the result of the judgment by the judging unit (element 1201, column 16, lines 52-56).

Allowable Subject Matter

6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the objections outlined above and in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose the reference value equal to the image density of a single dot + α wherein $\alpha \geq 0$.

Art Unit: 2853

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Julian D. Huffman
10 February 2006